

ABSTRACT OF THE DISCLOSURE

Into a channel formation region of a semiconductor substrate of p-type silicon, indium ions are implanted at an implantation energy of about 70 keV and a dose of about
5 $5 \times 10^{13} / \text{cm}^2$, thereby forming a p-doped channel layer. Next, germanium ions are implanted into the upper portion of the semiconductor substrate at an implantation energy of about 250 keV and a dose of about $1 \times 10^{16} / \text{cm}^2$, thereby forming an amorphous layer in a region of the semiconductor substrate deeper than the p-doped channel layer.